

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN

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LG ELECTRONICS, INC.,

Plaintiff,

v.

OPINION AND  
ORDER

07-cv-361-bbc

QUANTA COMPUTER INC., and  
QUANTA COMPUTER USA, INC.,

Defendants.

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This patent infringement case is before the court for claim construction. Plaintiff LG Electronics, Inc. is suing defendants Quanta Computer Inc. and Quanta Computer USA, Inc. for allegedly infringing United States Patent Nos. RE38,868, RE37,052, 6,782,488 and 7,088,655, which relate to aspects of playing and recording different kinds of media.

As is often the case, the parties failed to show that many of the asserted terms require judicial construction or that their proposed constructions were accurate and useful. These terms include “I-frames of intra-coded digital picture data,” “indicative of a plurality of relative positions . . .,” “replacement block,” “substitute block” and “real time data.” With respect to several other terms, it appears that the parties now agree on a proposed

construction, making it unnecessary to discuss those terms. The terms in dispute are construed below.

## I. MEANS PLUS FUNCTION CLAIMS

\_\_\_\_\_ A recurring dispute of the parties throughout their discussion of each of the patents is whether a particular element in a claim should be construed under 35 U.S.C. § 112, ¶6, which says that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” In other words, if the element does not identify the structure that performs the function, the structure is limited to the examples provided in the specification.

None of the terms in dispute include the phrase “means for,” which is the usual signal for a means plus function element. In arguing that the claims in dispute should not be construed under § 112, ¶6, plaintiff relies on the presumption employed by the Court of Appeals for the Federal Circuit “that the absence of th[e] term ‘means’ creates a rebuttable presumption that section 112, paragraph 6, does not apply.” Phillips v. AWH Corp., 415 F.3d 1303, 1311 (Fed. Cir. 2005). Plaintiff is correct that the presumption is a strong one and the court of appeals has found few examples that could overcome it. The court of

appeals has rejected the view that the element must “denot[e] a specific structure” to avoid application of § 112, ¶6, MIT v. Abacus Software, 462 F.3d 1344, 1356 (Fed. Cir. 2006); that section “applies only to purely functional limitations.” DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 469 F.3d 1005, 1023 (Fed. Cir. 2006). Thus, the court has held that vague terms such as “connector assembly,” Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1362-63 (Fed. Cir. 2004), “circuit,” Linear Technology Corp. v. Impala Linear Corp., 379 F.3d 1311, 1320 (Fed. Cir. 2004), and “detent mechanism,” Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed. Cir. 1996), fall outside the scope of § 112, ¶6.

Context is key. A term that may connote an adequate structure in one patent may not be sufficient in another patent. The question is whether one of ordinary skill in the relevant art would know what the structure is rather than view it as “simply a nonce word or a verbal construct that is not recognized as the name of structure and is simply a substitute for the term ‘means for.’” Lighting World, 382 F.3d at 1360.

Because defendants’ burden is so high, I agree with plaintiff that most of the terms in dispute should not be construed under § 112, ¶6. The three exceptions are found in the ‘868 patent: “an input unit receiving . . .” in claim 23, “a recording unit . . .recording . . .” in claim 23 and “a reproducing unit reproducing . . .” in claim 31. (The parties agree that some terms should be construed under § 112, ¶6; those terms are discussed below.)

A “unit” could be almost anything. For example, when the function of an element is “to reproduce,” it adds nothing to say that the structure is a “a reproducing unit”; it is simply a restatement of the function. Plaintiff points to nothing in the claim, the patent or the relevant art that would make its meaning any clearer. LG Electronics, Inc. v. Bizcom Electronics, Inc., 453 F.3d 1364, 1372 (Fed. Cir. 2006) (concluding that term “control unit” was not governed by § 112, ¶6 because claim itself described a control unit as “a CPU and a partitioned memory system”). If a patentee can avoid the limitations of § 112, ¶6, simply by taking the function and turning it into a noun, it is difficult to understand what purpose the section serves.

This leaves the question of what the structures of these three terms are because the parties dispute these as well. (They agree on the functions with the exception that defendants wish to include a reference to magnetic tape in the function of a “recording unit.” Because I agree with defendants that the ‘868 patent is limited to devices that use magnetic tape, I will include that as part of the function.) The court of appeals has said that “[t]he corresponding structure to a function set forth in a means-plus-function limitation must actually perform the recited function, not merely enable the pertinent structure to operate as intended.” Asyst Technologies, Inc. v. Empak, Inc., 268 F.3d 1364, 1371 (Fed. Cir. 2001). But if a particular structure is “integral to performing the claimed function,” Gemstar-TV Guide Intern., Inc. v. International Trade Commission, 383 F.3d 1352, 1363

(Fed. Cir. 2004), it must be included.

The parties' proposed structures for "input unit," "recording unit" and "reproducing unit" come from figures 7 and 8 of the '868 patent:

**FIG.7**

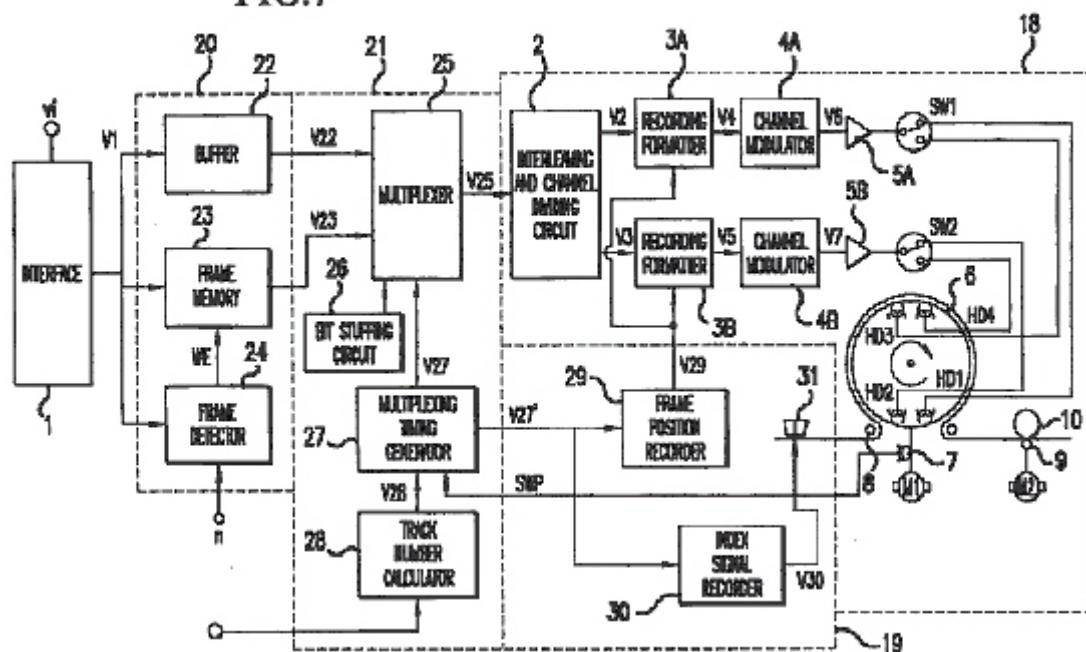
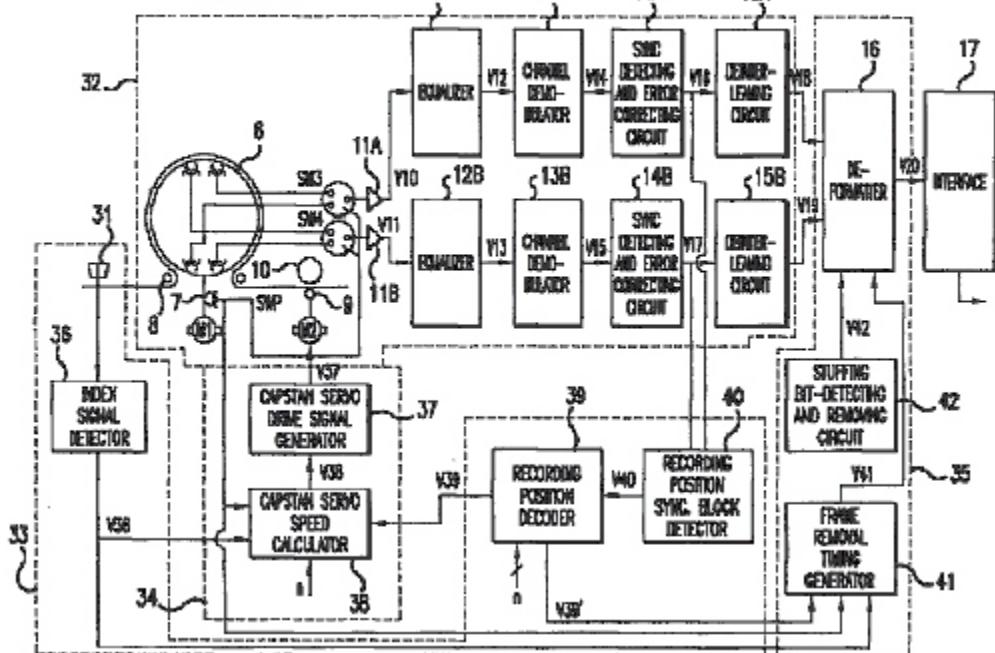


FIG.8



With

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respect to the “input unit receiving . . . ,” plaintiff says that the structure is buffer 20 of the extracting unit and equivalents thereof” in figure 7; defendants say it is the “combination of at least Interface 1 and frame extracting unit 20 (including buffer 22, frame memory 23 and frame detector 24) of the digital VCR.” Both sides cite the same passage for support:

First, in a recording mode, an input signal V1 such as a compressed HDTV signal or compressed normal TV signal is applied to the interface 1 which, in turn, converts the received signal into a signal V1 having the form capable of being recorded and reproduced.

The signal V1 from the interface 1 is then applied to the frame extracting unit 20. In the frame extracting unit 20, the received signal V1 is buffered and amplified by the

buffer 22. By the buffering and amplifying operations, the signal V1 is delayed for a predetermined time. The frame detector 24 detects compressed I-frames repeated at intervals of n frames, from a bit stream encoded to have frames with different compressed bit lengths. The frame memory 23 stores data of the detected I-frames.

‘868 patent, col. 7, lns. 9-22.

Although plaintiff does not include the interface 1 as part of the structure, it advances no argument in support of its exclusion. I agree with defendants that the passage makes it clear that the interface performs the function of receiving data. However, I agree with plaintiff that the frame memory 23 and frame detector 24 do not perform that function. Finally, plaintiff seeks to include “and equivalents thereof” as part of the structure but this is unnecessary because § 112 makes it clear that the “equivalents” of the structures disclosed in the specification are included. Further, including “equivalents” in a construction conflates the issue of claim construction with an infringement analysis under the doctrine of equivalents, Cross Medical Products, Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1316 (Fed. Cir. 2005) (in context of infringement analysis, considering whether disclosed structure, external nut, was equivalent to set screw in accused device).

Accordingly, I construe the function of “an input unit receiving . . .” as “receiving digital video data, the digital video data including I-frames of intra-coded digital picture data” and the structure as “Interface 1 and buffer 22 of the extracting unit 20.”

With respect to the recording unit, I agree with defendants that figure 7 clearly

identifies each of the components that together perform the function of recording. Plaintiff seeks to exclude some of these components that are not part of a written description of the recording unit elsewhere in the patent. ‘868 patent, col. 5, lns. 54-59. But this reference does not help plaintiff because it says only that the recording unit “includ[es]” certain components; it does not limit the components to those listed. SanDisk Corp. v. Memorex Products, Inc., 415 F.3d 1278, 1284 (Fed. Cir. 2005) (when drafter uses word “including,” it means that elements other than those listed may be present). However, figure 7 shows that the signal line 29 is *not* part of the recording unit and defendants do not make a case for including it. Accordingly, I conclude that the function of “a recording unit . . . recording” is “to record the digital video data and the plurality of the relative position data on the digital magnetic tape such that each specific data includes the associated relative position data and the intra-coded digital picture data.” The structure is interleaving and channel diving circuit 2, recording formatters 3A, 3B, channel modulators 4A, 4B, amplifiers 5A, 5B, switches SW1, SW2, heads HD1-HD4, drum motors M1, capstan motor M2, head drum 6, drum pulse generator 7, guide pin 8, capstan 9 and pinch roller 10.

The arguments regarding the structure of a “reproducing unit reproducing . . .” are similar. Figure 8 shows the components of the reproducing unit and they do not include the de-formatter as asserted by defendants. Accordingly, I construe the function of a “reproducing unit reproducing . . .” as “to reproduce digital video data, the digital video data

including I-frames of intra-coded digital picture data stored on digital magnetic tape"; the structure is "head drum 6, drum pulse generator 7, guide pin 8, capstan 9, pinch roller 10, switches SW1, SW3, drum motors M1, capstan motor M2, heads HD1-HD4, amplifiers 11A, 11B, equalizers 12A, 12B, channel demodulators 13A, 13B, sync detecting and error correcting circuit 14A, 14B, and deinterleaving circuits 15A, 15B."

Defendants contend that a number of other elements that do not use "means for" language should be construed under § 112, ¶6 nonetheless. I agree with plaintiff that the following terms should not be so construed: in the '868 patent, "a data generating circuit generating . . ." (claim 23), "a detection circuit . . . detecting . . ." (claim 31), and "a control circuit . . . receiving a command and controlling . . ." (claim 31); in the '488 patent, "a controller determining" (claim 14) and "a controller for controlling . . ." (claim 23); in the '655 patent, "a controller . . . to the detected information" (claim 13). Although the structures in these term are not specific, defendants have not overcome the presumption to show that they are simply nonce words or verbal constructs. Because the only dispute regarding these terms is whether they must be construed under § 112, ¶6, no construction is necessary.

## II. '868 PATENT

**Invention:** Digital recording for variable speeds

A. Devices Covered by the '868 Patent

digital video recording device (claims 23 and 39)

**Plaintiff's Proposed Construction:** No construction necessary. In the alternative, "any device that can record digital video data."

**Defendants' Proposed Construction:** digital video cassette recorder.

digital video reproducing device (claims 31 and 46)

**Plaintiff's Proposed Construction:** No construction necessary. Alternatively, "any device that can reproduce, or play back, digital video data."

**Defendants' Proposed Construction:** digital video cassette tape player.

digital recording medium (claims 23, 31, 39 and 46)

**Plaintiff's Proposed Construction:** No construction necessary. Alternatively, "any medium, such as an optical disc, magnetic disc, or tape, upon which digital data can be recorded."

**Defendants' Proposed Construction:** digital magnetic tape

The dispute for these three terms is the same: whether the reissued '868 patent is limited to media using magnetic tape or may include optical discs as well. Defendants say it is limited to magnetic tape; plaintiff says it isn't. The dispute is similar to the one in Netcraft Corp. v. Ebay, Inc., No. 3:07-cv-00254-bbc, 2007 WL 4527508, \*1 (W.D. Wis. Dec. 10, 2007), in which I considered whether "providing a communications link" meant

“providing customers with internet access” in the context of the plaintiff’s patent. As in Netcraft, plaintiff relies heavily on the claim language, saying that the ordinary meaning of the terms at issue in this case would not be limited to the constructions proposed by defendant.

Plaintiff is correct to say that the “ordinary” meaning of a term controls, Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005), but this is somewhat misleading because under the law of the Federal Circuit, the “ordinary” meaning is not synonymous with the *lay* understanding of the term. Rather, the “ordinary” meaning is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Id. at 1313. And, important for the purpose of this case, the court of appeals has stated that a person of ordinary skill in the art would not read the claims in a vacuum. This is because the claims

are part of a fully integrated written instrument, consisting principally of a specification that concludes with the claims. For that reason, claims must be read in view of the specification, of which they are a part. . . [T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.

Id. at 1315 (internal citations and quotations omitted).

Like the patent at issue in Netcraft, the ‘868 patent is crystal clear that the terms at issue have a narrower meaning than would be found in a general dictionary. The title of the patent is “Apparatus and method for controlling recording and reproduction in digital video

cassette tape recorder”; the abstract repeats this description of the invention and further states that the invention relates to the “travel of a magnetic tape at a normal speed”; and all discussions of the invention in the patent relate to video cassette recorders and devices that use magnetic tape. E.g., ‘868 patent, col. 4, lns. 14-16, 20, 31-35, col. 9, lns. 34-44, col. 11, ln. 24.

I agree with plaintiff that these observations are not necessarily dispositive. Of course, an invention may extend beyond its embodiments. In re Omeprazole Patent Litigation, 483 F.3d 1364, 1372 (Fed. Cir. 2007). But an invention *is* limited by the way in which the inventor describes it: “When a patent thus describes the features of the ‘present invention’ as a whole, this description limits the scope of the invention.” Verizon Services Corp. v. Vonage Holdings Corp., 503 F.3d 1295, 1308 (Fed. Cir. 2007). In this case, ‘868 patent describes “the present invention” in multiple instances as being limited to cassette tape recorders:

- “The present invention relates to a circuit device and method for controlling recording and reproduction in a digital cassette tape recorder,” ‘868 patent, col. 1, lns. 17-20;
- “In accordance with the present invention, this object can be accomplished by providing an apparatus for controlling recording and reproduction in a video cassette tape recorder,” ‘868 patent, col. 4, lns. 18-20;

- “the present invention provides an apparatus for controlling recording and reproduction in a magnetic VCR,” ‘868 patent, col. 11, lns. 44-46.

Plaintiff advances a number of arguments in favor of its more expansive reading, but it does not even attempt to explain away these express limitations in the specification. Instead, plaintiff relies on the fact that the ‘868 patent was reissued from an earlier patent under 35 U.S.C. § 251. All of the claims in the earlier patent were limited expressly to a “video cassette tape recorder.” Plaintiff says that it applied for a reissue of what became the ‘868 patent for the purpose of expanding the claims beyond video cassette tape to include optical discs.

Unfortunately for plaintiff, its intent is not demonstrated in the ‘868 patent. The term “optical disc” does not appear anywhere in the ‘868 patent; the sole medium discussed is still magnetic tape. Although some of the new claims use more generic terms such as “digital video recording device,” there is no indication anywhere in the ‘868 patent that such a device includes anything other than cassette tape recorders. In fact, as discussed above, that is the *only* interpretation of this term that is permitted by the ‘868 patent specification. Plaintiff cannot escape the limitations imposed by the specification simply by substituting more ambiguous language in the claims.

Although plaintiff conceded at the claim construction hearing that its subjective intent in reissuing the patent did not control claim construction, it cites MBO Laboratories,

Inc. v. Becton, Dickinson & Co., 474 F.3d 1323, 1332 (Fed. Cir. 2007), in which the court concluded that it was “compelled to give effect to MBO’s stated intent to broaden the coverage of its claims.” MBO does not help plaintiff because that case dealt with the application of the “recapture rule,” which required the court to determine whether the patentee had surrendered particular subject matter during the prosecution history of the original patent. Id. Neither the court nor the parties suggested that anything in specification limited the meaning of any claim terms, which is the situation in this case.

Plaintiff insists that the technology discussed in the ‘868 patent is adaptable enough to cover both magnetic and optical media. But the question for the purpose of claim construction is not what invention plaintiff could have claimed, but what invention the ‘868 patent actually discloses. If the notice function is to have any meaning, when the patent describes the “present invention” as being limited in a particular way, the public should be able to rely on that limitation. Because the invention disclosed in the ‘868 patent is limited to devices using magnetic tape, I must adopt defendants’ proposed constructions.

Accordingly, I construe “digital video recording device” to mean “digital video cassette recorder,” “digital video reproducing device,” to mean “digital video cassette tape player” and “digital recording medium” to mean “digital magnetic tape.”

B. Specific Data (Claims 23, 31, 39 and 46)

**Plaintiff's Proposed Construction:** No construction necessary

**Defendants' Proposed Construction:** removable data specifically created for speed varied reproduction.

To the extent this term might benefit from a construction, defendants have not provided one that is accurate. Defendants wish to define the term as data that must be (1) removable and (2) created for speed varied reproduction. With respect to the “created for speed varied reproduction,” I agree with plaintiff that the references defendants cite in the patent address what “specific data” is *used for* and not what it *is*. Thus, I see no reason why these concepts should be imported into the definition of the term. Further, the specification repeatedly uses the phrase “specific data for speed-varied production.” If “specific data” *meant* “created for speed varied reproduction,” there would be no reason to use the two phrases together. Under plaintiff’s view, the phrase “specific data for speed-varied production” is redundant, but the inventor obviously thought otherwise. The fact that the inventor chose not to add “for speed-varied production” to “specific data” in the claims suggests that the term was not intended to be limited to this one purpose unless otherwise specified.

With respect to whether “specific data” must be removable, all of defendants’ support for this limitation comes from embodiments, figures 10 and 14. These are not limitations on the invention. Accordingly, I conclude that defendants have failed to show that any

construction of this term is necessary.

### III. '052 PATENT

**Invention:** a method of copy protection

#### A. Judicial Correction

receiving scrambled digital data and a marker (claim 96)

**Plaintiff's Proposed Construction:** a receiving unit receiving scrambled digital data and a marker

**Defendants' Proposed Construction:** No construction necessary

the method of claim 96 (claim 102)

**Plaintiff's Proposed Construction:** the apparatus of claim 96

**Defendants' Proposed Construction:** No construction necessary

Plaintiff says that these two terms contain “typographical” errors that should be fixed by the court. Plaintiff is overreaching. The law in this area is uncharacteristically clear: a court may correct a patent only if the error *and* its correction are obvious. Group One, Ltd. v. Hallmark Cards, Inc., 407 F.3d 1297, 1303 (Fed. Cir. 2005). If there is more than one way the error could be fixed, it is out of the court’s hands. Novo Indus., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1357 (Fed. Cir. 2003) (refusing to correct “a” to “and” because other

possibilities for correction existed). In that situation, the party must seek a correction before the Patent and Trademark Office under 35 U.S.C. §§ 254 and 255.

In this case, plaintiff makes a strong case that claims 96 and 102 contain errors: they do not make much sense as they are written. As plaintiff points out, claim 96 as currently written is “an apparatus for processing copy protected digital data,” but the next element recites a *step* rather than an element of the apparatus.

However, even if plaintiff is correct that the current version of the claims are nonsensical, it cannot prevail because the correction it seeks is “subject to reasonable debate.” Novo, 350 F.3d at 1355. Defendants identify several different possibilities for correcting the error. As one example, they suggest that claim 96 could be a method claim, which means that instead of correcting the claim by adding “a receiving unit,” the phrase “means for” could be added to the beginning of the claim to make it a means plus function claim. Plaintiff failed to show either in its briefs or at the claim construction hearing that such a correction would be unreasonable.

Following the claim construction hearing, plaintiff filed a letter in which it notified the court that the PTO had granted plaintiff’s request to correct the patent. As a result, plaintiff moved the court to “order that the corrections shown in the attached Certificate of Correction are effective for all purposes in this action.” Dkt. #70.

Plaintiff’s conduct is sanctionable. As defendants point out, any correction plaintiff

might obtain from the patent office has a *prospective effect* only, meaning it has no bearing on this case. It cannot be used to show that defendants have infringed the claims at issue in this lawsuit, which was filed before plaintiff obtained the correction. Southwest Software, Inc. v. Harlequin Inc., 226 F.3d 1280, 1294 (Fed. Cir. 2000) (“The certificate of correction is only effective for causes of action arising after it was issued.”). In its letter to the court, plaintiff fails to acknowledge this critical limitation, misleadingly suggesting instead that this court is required to incorporate the PTO’s correction into this case.

After defendants moved to strike plaintiff’s motion to correct the patent, plaintiff responded by saying that it filed the certificate of correction simply to insure that the court had the complete prosecution history for each patent. This only makes matter worse for plaintiff because that is clearly *not* the reason it filed the certificate. Rather, the certificate was accompanied by plaintiff’s request for judicial correction. Plaintiff only hurts its case by seeking to advance its position through subterfuge. Needless to say, its motion for judicial correction will be denied.

#### B. Devices Covered by the ‘052 Patent

processing copy protected digital data in a digital data processing apparatus (claim 63)

**Plaintiff’s Proposed Construction:** No construction necessary. Alternatively, processing in a digital data processing device digital data having information that determines the extent to which copying is permitted.

**Defendants' Proposed Construction:** processing digital data protected from copying in a digital magnetic processing apparatus.

an apparatus for processing copy protected digital data (claim 96)

**Plaintiff's Proposed Construction:** No construction necessary. Alternatively, processing in a digital data processing device digital data having information that determines the extent to which copying is permitted.

**Defendants' Proposed Construction:** a digital magnetic processing apparatus for processing digital data protected from copying.

The issue for these two terms is similar to some of the terms in the '868 patent: defendants say that a "magnetic tape" limitation must be read into these terms. Although the arguments are similar because both the '868 patent and '052 patent were reissued versions of patents that were addressed to matters relating to VCRs, there is a critical difference between the '868 patent and the '052 patent. In the '052 reissued patent, the inventors removed the references to "magnetic tape." For example, where the parent patent described the "present invention" as relating to "a copy prevention method and apparatus of a digital *magnetic* recording/reproducing system, and more particularly to a copy prevention method and apparatus of a digital *magnetic* recording/reproducing system," the reissued '052 patent now says simply that the present invention relates to "a copy prevention method and apparatus of a digital recording/reproducing system, and more particularly to a copy prevention method and apparatus of a digital recording/reproducing system." '052 pat., col. 1, lns. 21-25.

Defendants argue that plaintiff was not entitled to change the scope of the invention in this way, but that is a question of validity, not claim construction. Because the specification of the '052 does not explicitly limit the invention to devices using magnetic tape, I cannot adopt defendants' proposed limitations. The parties offer no other arguments for construction of these terms, so I will not construe them at this time.

C. Marker and Control Data

marker (Claims 63 and 96)

**Plaintiff's Proposed Construction:** No construction necessary. Alternatively, "any digital identifier including both copy protection information and control data."

**Defendants' Proposed Construction:** "an encrypted identifier that is updated during copy prevention."

control data (claims 63 and 96)

**Plaintiff's Proposed Construction:** No construction necessary. Alternatively, "data that controls a parameter of a descrambling operation."

**Defendants' Proposed Construction:** data that controls descrambling depending on whether copying is allowed.

These terms are defined in the claims themselves, a "marker" as "copy prevention information and control data" and "control data" as "data controlling a parameter of a descrambling operation for descrambling . . . digital data." Defendants seek to include

additional limitations, but their support for these limitations come from preferred embodiments or the parent patent. Defendants have cited no authority for allowing limitations from the parent patent to be read into the reissued patent. Again, to the extent that plaintiff added “new material” to the reissued patent as asserted by defendants, that is a question of validity. Accordingly, I agree with plaintiff that defendants have failed to show that these terms require further construction.

D. Copy Prevention Means for Performing a Copy Prevention Function Based on Said Copy Prevention Information (Claim 96)

**Plaintiff’s Proposed Construction:**

Function: preventing unauthorized copying according to information that indicates the extent to which authorized copies are permitted or not permitted

Structure: microprocessor running control software such as marker analyzer 34 and equivalents thereof.

**Defendants’ Proposed Construction:**

Function: preventing or authorizing copying based upon updatable data that indicates the extent to which authorized copies are permitted or are not permitted

Structure: combination of marker decoder 33, marker analyzer 34, marker updating and encoding unit 35.<sup>1</sup>

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<sup>1</sup> In their briefs, defendants sought to include in the structure “marker buffer 36, marker inserter 32, control work buffer 37, descrambler 24 and control lines connecting those components,” but omitted these items from the parties’ jointly filed chart of proposed claim constructions, dkt. #67. Because the chart was filed after briefing was concluded, I

The parties agree that this term should be construed under § 112, ¶6, but they dispute both the function and the structure of the term. Defendants conceded at the claims construction hearing that their proposed function is simply another way of imposing a magnetic tape limitation on the patent, Tr. at 83, but I have rejected this argument. Defendants have advanced no other objections to plaintiff's proposed function, so I will adopt it. Further, defendants have not shown that any structure other than the marker analyzer actually performs the copy prevention; they argue only that the other components enable that function, but that is not enough. Asyst Technologies, 268 F.3d at 1371. Again, however, I will omit plaintiff's reference to the "equivalents" of the marker analyzer.

I construe the function of this term as "preventing unauthorized copying according to information that indicates the extent to which authorized copies are permitted or not permitted" and the structure as "marker analyzer 34."

#### IV. '488 PATENT

**Invention:** Manages defects on disc during writing, using multiple methods

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will use the proposed constructions provided in the chart.

A. And/or

based upon a data type to be written or read and/or whether or not an available spare block remains (claims 4, 14, and 23)

**Plaintiff's Proposed Construction:** based upon a data type to be written or read **or** based upon a data type to be written or read **and** whether or not an available spare block remains.

**Defendants' Proposed Construction:**

- (1) based upon a data type to be written or read, OR
- (2) based upon whether or not an available spare block remains, OR
- (3) based upon a data type to be written or read and whether or not an available spare block remains.

Believe it or not, the dispute is over the meaning of “and/or.” Plaintiff concedes that ordinarily the “/” in “and/or” is a symbol for “or” so that “and/or” means “and *or* or.” In other words, “and/or” means *either* of the two options is possible *or both* options are possible, which is consistent with defendants’ proposed construction. Under plaintiff’s bizarre proposed construction, the term does not mean “either” or “both”; it can be both, but it cannot be either. If it is not both, plaintiff says, it must be the first option only.

To its credit, plaintiff does not attempt to argue that “and/or” has a specialized meaning in the art. Instead, plaintiff says that the specification of the ‘488 patent limits the meaning of “and/or” because the “the decision to replace a defective block is never made solely based upon ‘whether or not a spare block remains.’” But its argument is based solely on figures, that is, embodiments. Plaintiff cites nothing in the specification that would

*prohibit* the invention from acting in a way that is consistent with defendants' construction, that is, the way that the term would ordinarily be understood. "Had the patentee, who was responsible for drafting and prosecuting the patent, intended something different, it could have prevented this result through clearer drafting." Miken Composites, L.L.C. v. Wilson Sporting Goods Co., – F.3d – , 2008 WL 313918, \*4 (Fed. Cir. 2008) (internal quotations omitted). Accordingly, I will adopt defendants' construction of this term: "(1) based upon a data type to be written or read, or (2) based upon whether or not an available spare block remains, or (3) based upon a data type to be written or read and whether or not an available spare block remains."

## V. '655 PATENT

**Invention:** Using write strategies to optimize writing to optical discs

### A. Identification Information (Claims 5, 10, 13, and 15)

**Plaintiff's Proposed Construction:** No construction necessary. Alternatively, agree with defendants' construction.

**Defendants' Proposed Construction:** data or code contained in a writable optical storage medium that can be used to distinguish discs made by different manufacturers.

This one is a bit of a head scratcher. Plaintiff agrees with defendants' proposed

construction, but suggests that the term does not require construction. Because I agree with defendants that the meaning of “identification information” would not be obvious to a jury, I will adopt defendants’ construction.

The parties seek construction of several other means plus function terms in the ‘655 patent, but they identify nothing more than cosmetic differences in describing the functions. Because neither side develops an argument in favor of its view, I decline to construe these terms at this time.

## ORDER

IT IS ORDERED that

1. Plaintiff LG Electronics, Inc.’s motions for judicial correction, dkt. nos. 70 and 74, are DENIED; the motion of defendants Quanta Computer, Inc. and Quanta Computer USA, Inc. to strike plaintiff’s motion for judicial correction is DENIED as unnecessary.
2. The disputed terms in U.S. Patent No. RE38,868 are construed as follows:
  - “digital video recording device” means “digital video cassette recorder”; “digital video reproducing device” means “digital video cassette tape player”; and “digital recording medium” means “digital magnetic tape”;
  - the function of “an input unit receiving . . .” is “receiving digital video data, the digital video data including I-frames of intra-coded digital picture data”; the structure is

“Interface 1 and buffer 22 of the extracting unit 20”;

• the function of “a recording unit . . . recording” is “to record the digital video data and the plurality of the relative position data on the digital magnetic tape such that each specific data includes the associated relative position data and the intra-coded digital picture data”; the structure is “interleaving and channel diving circuit 2, recording formatters 3A, 3B, channel modulators 4A, 4B, amplifiers 5A, 5B, switches SW1, SW2, heads HD1-HD4, drum motors M1, capstan motor M2, head drum 6, drum pulse generator 7, guide pin 8, capstan 9 and pinch roller 10”;

• the function of a “reproducing unit reproducing . . .” is “to reproduce digital video data, the digital video data including I-frames of intra-coded digital picture data stored on digital magnetic tape”; the structure is “head drum 6, drum pulse generator 7, guide pin 8, capstan 9, pinch roller 10, switches SW1, SW3, drum motors M1, capstan motor M2, heads HD1-HD4, amplifiers 11A, 11B, equalizers 12A, 12B, channel demodulators 13A, 13B, sync detecting and error correcting circuit 14A, 14B, and deinterleaving circuits 15A, 15B.”

3. The disputed terms in U.S. Patent No. RE37,052 are construed as follows:

• the function of “copy prevention means for performing a copy prevention function based on said copy prevention information” is “preventing unauthorized copying according to information that indicates the extent to which authorized copies are permitted or not permitted”; the structure is marker analyzer 34.

4. The disputed term in U.S. Patent No. 6,782,488 is construed as follows:

• “based upon a data type to be written or read and/or whether or not an available spare block remains” means “(1) based upon a data type to be written or read, or (2) based upon whether or not an available spare block remains, or (3) based upon a data type to be written or read and whether or not an available spare block remains.”

5. The dispute term in U.S. Patent No. 7,088,655 is construed as follows:

• “identification information” means “data or code contained in a writable optical storage medium that can be used to distinguish discs made by different manufacturers.”

Entered this 4th day of March, 2008.

BY THE COURT:

/s/

BARBARA B. CRABB  
District Judge